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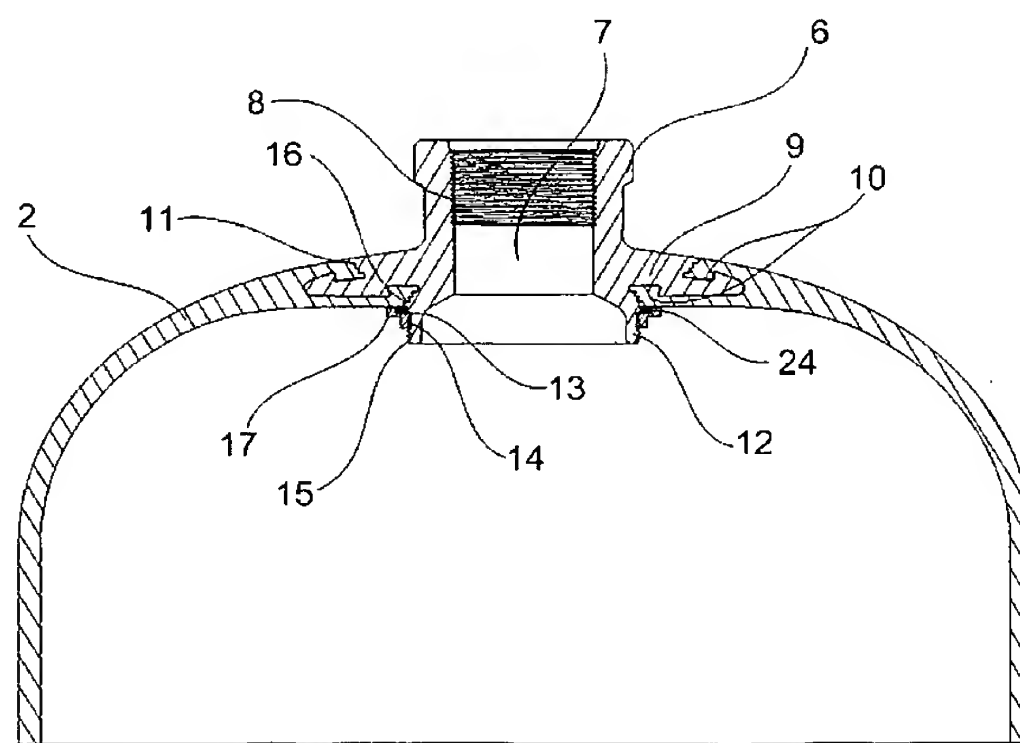
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(54) Title: THE HIGH GAS-TIGHTEN METALLIC NOZZLE-BOSS FOR THE HIGH PRESSURE COMPOSITE VESSEL



(57) Abstract: The present invention relates to a metal nozzle boss provided with a sealing device, which has highly improved tightness and is combined with a plastic liner of a composite vessel used as a high-pressure vessel. The metal nozzle boss uses an elastic seal ring and a tightening piece in the plastic liner, so that the nozzle boss reliably seals the junction of the nozzle boss and the liner and prevents gas leakage from the vessel. The blade part of the nozzle boss has a dovetail-shaped locking groove, with locking ridges formed in the locking groove. Thus, when the plastic liner is produced by injecting molten resin into the locking groove, the plastic liner is securely combined with the metal nozzle boss. The composite vessel having the metal nozzle boss can be used as a fuel tank for natural gas vehicles or a hydrogen tank for fuel cell vehicles.

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